January-10-13 11:04:50 AM Item ID: D3067-1 Accept *N900040100* Setup Start **Revision ID:** Item Name: End Plate **Start Date:** 1/10/13 **Start Qty:** 60.00 *60* **Cust Item ID:** Required Date: 1/17/13 Req'd Qty: 60.00 *60* **Customer:** Reference: Run Process Plan: MLJ Date: 1301-10 Tooling: Approvals: Date: Stop QC: ____ Date: ___ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Insp. Accept Reject Reject **Work Center ID** Description **Run Hours** Qty Code Qty Number Stamp Draw Nbr **Revision Nbr** D3067 Rev A 100 0.00 100 FLOW WATER JET *100* JM13-1-20 Waterjet 0.00 Memo FLOW CNC Waterjet 1-Cut as per Dwg D3067 Dwg Rev: Prog Rev: 2-Deburr if necessary 110 QC2- Inspect parts off machine FAI/FAIB 0.00 *110* 100 0 QC 0.00 Memo Quality Control 120 QC8- Inspect parts - second check *120* QC Memo Quality Control

											DQA:	Date:		
NCR:	⁄es	/ No				WORK ORDER NON-C	CONI	FORM	AANCE / UPI	DATE	QA Closed:	Date:		
Work Orde	er:					DISPOSITION	AGAINST DEPARTMENT/PROCESS							
Part N	- No					Rework Scrap Use-as-is		ſ	Skid-tube Machining noforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other	
NCR N	No					Work Order Update			Large Fab	Composite	Rec/Stor	Supplier	Other	
Root					Descri	ption of work order update	lni	itial	Act	tion	Sign &		•	
Cause		Date	Step	Qty	(or Non-conformance	Chie	f Eng	Descr	ription	Date	Verification	QC Inspector	
Doc/Data														
Equip/Tooling									I					
Operator			ł						1					
Material									į					
Setup									İ					
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FAULT CATEGORY Landing Gear General Bending Bend Grain Ovalized Pressure/Forced BOM/Route Centre Not Concentric to O/S Temperature/Cure Hardware Over/Under tolerance Broken/Damaged Cracks Inspection Incomplete Part Incorrect Weld Crushed/Crimped. Burrs Part Lost/Missing Instructions Incomplete/Unclear Wrong Stock Pulled Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled Positioned Wrong Inspection Strip in Tube Misread Cut Too Short Other Power Loss/Surge Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Folio Wave/Twist in Tube Outside Dimensions

Process
Supplier
Training
Unapproved

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

January-10-13 11:04:50 AM Item ID: D3067-1 Accept Setup Start *N900040100* **Revision ID:** Item Name: End Plate **Start Date:** 1/10/13 **Start Qty: 60.00** *60* **Cust Item ID:** Required Date: 1/17/13 Req'd Qty: 60.00 **Customer:** Reference: Run Process Plan: Date: Approvals: **Tooling:** Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. **Work Center ID** Description **Run Hours** Code Qty Qty Number Stamp. 130 0.00 NC BRAKE *130* Brake NC 0.00 Memo Brake NC Bend as per Dwg D3067 140 QC5- Inspect part completeness to step on W/O *140* QC Memo

150

Identify as per dwg & Stock Location: WA

0.00

150 Packaging

Quality Control

Memo

0.00

Packaging

*** STOCK IN STEP CELL***

									DQA:	Date:				
NCR: Ye	es / No				WORK ORDER NON-C	ONFORM	MANCE / UP		QA Closed:	Date:				
Work Orde	r•				DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part No. NCR No. Root Desc					Rework Scrap Use-as-is Work Order Update	Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite			Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier		Engineering Quality Other			
Root				Descri	ption of work order update	Initial	Ac	tion	Sign &					
Cause	Date	Step	Qty	•	or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector			
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FAULT CATEGORY Landing Gear General Bending Bend Grain Pressure/Forced Ovalized BOM/Route Centre Not Concentric to O/S Hardware Over/Under tolerance Temperature/Cure Cracks Broken/Damaged Inspection ncomplete Part Incorrect Weld Crushed/Crimped. Burrs Wrong Stock Pulled Instructions Incomplete/Unclear Part Lost/Missing Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled Positioned Wrong Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Other Drill Holes Ripples in Bend Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio Outside Dirnensions

Unapproved

Page 3

January-10-13	11:04:30 AM	1											
Item ID: Revision ID: Item Name:	D3067-1 End Plate	•		Accept	*N900	040	100)*	Setup	Start Stop	*N:	S1* S2*	
Start Date: Required Date: Reference:	1/10/13 1/17/13	Start Qty: 60.00 Req'd Qty: 60.00	*60* *60*		Cust Item I Customer:						i Vi	.7/	
Approvals:	Process Pla		Date:	Tooling: SPC (Y/N):		ate:			Run	Start Stop	*N *N	R1* R2*	
Sequence ID/ Work Center II 160 *160* QC Quality Control)	Operation Description QC21- Final Inspection - Memo	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accep Qty	t Re Qt		Reject Number	Insp. Stamp)

			DQA:	Date:	
ICR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE			

											QA Ciosea:	Date	2:
Work Ord	er:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part I	-					Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite			4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root						ption of work order update		nitial		ction	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data	Ш				•								
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Material	Ц						1						
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Other	Н											:	
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Training	Н												
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							AUL	T CATE	GORY				
Landi					_	General		l		[٦	F	
	-	Bending	_		. –	Bend		Grain		<u> </u>	Ovalized		Pressure/Forced
	-	Centre No	t Concer	ntric to (^{D/S}	BOM/Route		Hardwa			Over/Under	 -	Temperature/Cure
	Н	Cracks			<u> </u>	Broken/Damaged	<u> </u>		ion Incomplete	–	Part Incorre	-	Weld
	-	Crushed/0	Crimped.			Burrs	_		ions Incomplete	/Unclear	Part Lost/M	issing	Wrong Stock Pulled
	\vdash	Cuffs			-	Contamination		Mainte		-	Part Moved		
	-	Heat Trea			<u> </u>	Countersink	_	Mislabe		<u> </u>	Positioned \		_
		Inspection	•	Tube	<u> </u>	Cut Too Short	-	Misread	d	L.	Power Loss/	'Surge	Other
i	${f}$	Ripples in				Drill Holes	\vdash	Offset					
	\vdash	Torque W			`	Drawing	<u>_</u>	l	Calibration				
		Turning Se	•		igsqcup	Finish	\vdash	1	Sequence				
	ı l	Wave/Tw	ist in Tuk	e e		Folio	1	Outside	Dirnensions				

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Picklist Print

January-10-13 11:04:54 AM

Work Order ID: 95515

93313

D3067-1

Parent Item Name: End Plate

95515

D3067-1

Start Date: 1/10/13

Required Date: 1/17/13

Start Qty: 60.00

Required Qty: 60.00

Comments:

Parent Item:

IPP: 03.01.21 Remove step 6 (Deburr)

KJ

IPP Rev:B Now on Water jet 06-06-16 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M5052H32S.063		Purchased	No			100	sf	94.8053	0.0625	3 .947 368			
*M5052H3	328 063	*							**	A. Co.	5 5.F.		Jm 13-1-20

5052-H32 .063 Sheet

Location	Loc Qty	Loc Code	
MAT022	94.805264		
114322	25.705264		
120603	38		120603
121901	31.1		

Page 1

												DQA:	Da	te:	
NCR:	Yes	/ No				WORK ORDER NON-O	100	NFORI	MANCE / UP	DATE			· · · · ·		
												QA Closed:	Da	te:	
Work Ord	er:					DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part 1	Part No. NCR No. Root Desc					Rework Scrap Use-as-is Work Order Update		Skid-tube Cross Machining Smal Thermoforming Finis Large Fab Comp				Water Jet Eng Prod. Eng. Coor. Rec/Store/Packaging Supplier			Engineering Quality Other
Root					Descri	ption of work order update		nitial	Ac	tion		Sign &			
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription		Date	Verificatio	n	QC Inspector
Doc/Data															
Equip/Tooling	Ш														
Operator	Ц														
Material	Ш														
Setup	Ш														
Other	Щ						1								
Process	Ш														
Supplier															
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						F	AUL	T CATE	GORY						
Landi	ing G	iear				General			.i.			-			•
		Bending				Bend		Grain				Ovalized			Pressure/Forced
		Centre No	ot Concer	ntric to (o/s	BOM/Route		Hardwa	ire			Over/Under	tolerance		Temperature/Cure
	Centre Not Concentric to O/S Cracks				Broken/Damaged	Inspection Incomplete					Part Incorred	ct		Weld	

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

Wrong Stock Pulled

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	75515
Description: End Plate	Part Number:	D3067-1
Inspection Dwg: D3067 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	First Article		Prototype
		. —	

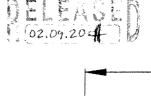
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.900	+/-0.010	2.908"	_			
2.749	+/-0.010	2.908° 2.755°	-			
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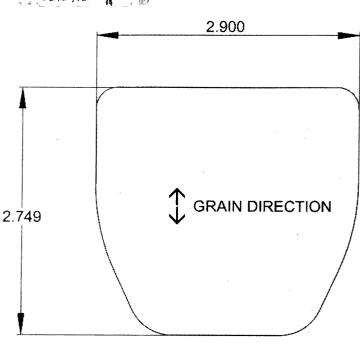
Measured by:	Tim	Audited by:	SM>	Prototype Approval:	N/A	
Date:	13-1-20	Date:	13121	Date:	N/A	

Rev	Date	Change	Revised by	Approved
Α	03.10.07	New Issue	KJ/RF	- 14
			, }\	

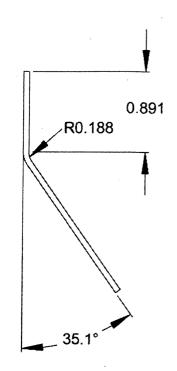


DESIGN CO DRAWN BY			DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECK	界	APPROVED -	D3067	REV. A SHEET 1 OF 1
02.09.11			END PLATE	SCALE
Α	0:	2.09.11	NEW ISSUE	





D3067-1 FLAT PATTERN



D3067-1 BEND DETAIL

SUBJECT TO A SEN IMENI

D3067-1 END PLATE

1) MACHINE PER DWG FILE "D3067-1.SLDPRT"
2) MATERIAL: 5052-H32 PER QQ-A-250/8 (REF DART SPEC. M5052H32S.063)
OR 6061-T6 PER QQ-A-250/11 (REF DART SPEC. M6061T6S.063)
ALUMINUM SHEET, 0.063 THICK

3) FINISH: NONE
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES

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